

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 02-0370	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 03/32169	International filing date (day/month/year) 09/10/2003	(Earliest) Priority Date (day/month/year) 09/10/2002
Applicant THE BOEING COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

- ☐ as suggested by the applicant.
- ☒ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.

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☐ None of the figures.

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Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

An aircraft wing includes a leading airfoil element (36) and a trailing airfoil element (38). At least one slot (12) is defined by the wing during at least one transonic condition of the wing. The slot (12) may either extend spanwise along only a portion of the wingspan, or it may extend spanwise along the entire wingspan. In either case, the slot (12) allows a portion of the air flowing along the lower surface (18) of the leading airfoil element (36) to split and flow over the upper surface (20) of the trailing airfoil element (38) so as to achieve a performance improvement in the transonic condition.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B64C3/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B64C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 6 293 497 B1 (ANAST PETER Z ET AL) 25 September 2001 (2001-09-25) cited in the application abstract column 1, line 27 - line 63 column 2, line 46 -column 4, line 63; figures	22-39, 42-50, 60,61 1-21,40, 41,51-59
X Y	EP 0 838 394 A (BOEING CO) 29 April 1998 (1998-04-29) cited in the application abstract column 1, line 16 - line 42 column 3, line 26 -column 4, line 33; figures	22-39, 42-50, 60,61 1-21,40, 41,51-59

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

19 April 2004

Date of mailing of the international search report

29/04/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 856 735 A (KUEHL PETER ET AL) 15 August 1989 (1989-08-15) abstract column 3, line 5 - line 66 -----	1-61
A	US 5 265 830 A (ALLEN JOHN B) 30 November 1993 (1993-11-30) column 1, line 11 - line 30 -----	1-61

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6293497	B1	25-09-2001	AU 5239098 A DE 69718659 D1 DE 69718659 T2 EP 0932548 A1 WO 9817529 A1	15-05-1998 27-02-2003 22-05-2003 04-08-1999 30-04-1998
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US 4856735	A	15-08-1989	DE 3140350 A1 EP 0076907 A2 JP 1723139 C JP 3080680 B JP 58076400 A	28-04-1983 20-04-1983 24-12-1992 25-12-1991 09-05-1983
US 5265830	A	30-11-1993	NONE	